

ABSTRACT

A screening method for identifying mutant polypeptides having at least one amino acid difference from a wild type protein involved in a receptor-ligand interaction is disclosed. Also disclosed are mutant polypeptides of the hematopoietic growth factor flt3-Ligand (flt3-L) identified using this method, nucleic acids encoding these flt3-L mutant polypeptides, and methods of treatment involving *in vitro* and *in vivo* use of the mutant polypeptides and nucleic acids.